What Is Claimed Is:

1. A bicycle drive unit of multiple pedaling modes, comprising:

a drive shaft S1 on one side having inner wheels of a counterclockwise one-way clutch B and a clockwise one-way clutch A coupled thereto by means of sunk keys 2, and engaged with a ring gear 9 having an outer circumference attached to a chain sprocket 10 and an inner circumference having gears of a saw tooth shape formed therein, wherein an inner wheel of a central gear 3 is cold press-fitted to an outer wheel of the counterclockwise one-way clutch B;

a plurality of hollow turnabout gears 6 engaged with the central gear 3 of the drive shaft S1;

a drive shaft S2 on the other side having one side rotatably inserted into an inner bearing housing H1 that is integrally formed with the rotary plate 1 and the other side coupled to the inner wheel of the clockwise one-way clutch A and the counterclockwise one-way clutch B by means of the sunk keys 2, wherein the inner wheel of the central gear 3 is cold press-fitted and coupled to the outer wheel of the clockwise one-way clutch A, and the drive shaft S2 is engaged with the ring gear 9 having the outer circumference attached to the chain sprocket 10 and the inner circumference having gears of a saw tooth shape formed therein; and

a plurality of turnabout gears 4, a two-way turnabout gear 5 and a hollow turnabout gear 6 all of which are coupled to the rotary plate 1 and engaged with the central gear 3 of the drive shaft S2.

2. The bicycle drive unit as claimed in claim 1, wherein a flange 11 is press-fitted and coupled to the outer wheel of the clockwise one-way clutch A on the drive shaft S1 and is connected to the ring gear 9 by means of a locking screw 13.

3. The bicycle drive unit as claimed in claim 1 or 2, wherein a support bearing 12 is inserted into the inner circumference of the ring gear 9, and the inner wheel of the support bearing 12 is coupled to an outer circumference of an outer bearing housing H2, whereby the ring gear 9 is prevented from fluctuating and deviating when being rotated and has a stabilized rotational force.

4. The bicycle drive unit as claimed in claim 1, wherein the central gear 3 inserted into the outer wheel of the clockwise one-way clutch A of the drive shaft S1, the turnabout gear 4 and the two-way turnabout gear 5 are assembled into the outer circumference of the clockwise one-way clutch A of the drive shaft S1, whereby the drive shaft S1 and the drive shaft S2 have the same speed when rotating.

5. The bicycle drive unit as claimed in claim 1, further comprising:

detent pins 15 inserted into a plurality of holes formed in the inner bearing housing H1;

a brace 14 attached to the outer circumference of the outer bearing housing H2 by means of the locking screw 13;

a detent pin guide 17 coupled to the brace 14;

a return spring 16 inserted into the detent pin guide 17; and a rear movement control unit having detent latches 22 and hand levers 21 connected to the detent pins 15 by means of steel wires 20, whereby the bicycle is moved backward by manipulating the hand lever 21.